

three types of previous displayed data. In addition all multiple steps are reversible.

Although the invention is described with respect to a preferred embodiment, modifications thereto will be apparent to those skilled in the art, and such modifications can be made while still retaining the spirit of the invention.

Therefore the following claims are drafted to describe the scope of the invention and any such modifications falling within the spirit of the invention.



1. A method of displaying data in an information display system comprising:
 - differentiation means to distinguish to the user portions of said data which has been displayed in at least a section of a display screen prior to one or more view change operations, from that portion of said data which was essentially undisplayed prior to said view change operation
 - continuation means to increment said differentiation of said data with subsequent updates of any views.
2. The method of claim 1, wherein said differentiation means includes graphical shading means, in any direction, to mark data sections.
3. The method of claim 1, wherein said differentiation means includes features such as lines, bars, arrows, frames, outlines, special fonts, variable spacing, flashing characters, and the like, which after a view change operation, are displayed on said viewable area and directs the eye to continue viewing at the point of newly displayed data.
4. The method of claim 1, further comprising:
 - segregation means to mark previously displayed data with at least one substantially adjacent character field in proximity to data field, which after a view change directs the eye to continue viewing at the point of newly displayed data.

5. The method of claim 1, wherein said differentiation means includes dissolve means which allow said differentiation means to fade away from said display area after a certain amount of elapsed time or a certain number of subsequent viewing operations.
6. The method of claim 1, further comprising:
 - switching means to toggle said differentiation means between states where previously displayed data is marked to where previously undisplayed data is marked.
7. The method of claim 1, further comprising:
 - metrics means to gather and process statistics from the viewing session, including but not limited to, sections of said data file that were displayed, sections of said data file that were not displayed, elapsed time said sections of said data file were displayed, and number of times said sections were displayed.
8. A method of displaying data in an information display system having a display screen and a scrolling means, where if said data file is larger than current display region, scrolling or view changes allow piecewise display of said data file comprising:
 - detection means to detect status of said data portions in said display
 - indication means to mark or visually differentiate said display status

9. The method of claim 8, further comprising:

- continuation means to increment said indication means of said data with subsequent updates of the view.

10. The method of claim 8, wherein said indication means includes graphical shading means, in any direction, to mark data sections.

11. The method of claim 8, wherein said indication means includes features such as lines, bars, arrows, frames, outlines, special fonts, variable spacing, flashing characters, and the like, which after a view change operation, are displayed on said viewable area and directs the eye to continue viewing at the point of newly displayed data.

12. The method of claim 8, further comprising:

- segregation means to mark previously displayed data with at least one substantially adjacent character field(s) in proximity to data field, which after a view change directs the eye to continue viewing at the point of newly displayed data.

13. The method of claim 8, wherein said indication means includes dissolve means which allow said indication means to fade away from said display area after a certain amount of elapsed time or a certain number of subsequent viewing operations.

14. The method of claim 8, further comprising:

- selection means whereby results of said differentiation means can be converted to selected data in conjunction with an editing system which may use said selected data sections to perform editing procedures.

15. The method of claim 8, further comprising:

- metrics means to gather and process statistics from the viewing session, including but not limited to; sections of said data file that were displayed, sections of said data file that were not displayed, elapsed time said sections of said data file were displayed, and number of times said sections were displayed.

16. The method of claim 8, further comprising:

- adjustment means to provide continuous viewing by forcing newly displayed data to start at essentially one begin location in said display region, and subsequently adjusts said viewing area to accommodate varying size data sections, or append null data to said data file to allow said newly displayed data to start at said begin location.

17. An information display system having a display screen and a scrolling means, comprising:

- differentiation means to distinguish to the user that portion of the data which has been displayed in at least a portion of said display

screen, prior to one or more view change operations, from that portion of said data which was undisplayed prior to said view change operation

- means to increment said differentiation of said data with subsequent updates of any views
- means to return to the previously viewed data.

18. The method of claim 17, further comprising:

- detection means to detect and store status of data with regard to display in session.

19. The method of claim 17, further comprising:

- processing means to calculate and update said differentiation means based on display status as measured by said detection means.

20. The method of claim 17, further comprising:

- scrolling means whereby said differentiation means can be grabbed and moved by a point and click device as used in conjunction with the user interface, resulting in moving said data file section and differentiation means with respect to said viewing area.

Add
A7

ABSTRACT OF THE DISCLOSURE

A method and apparatus for providing continuous viewing of data when a scroll or view change operation is performed while displaying data in a data display system where the data file is larger than can practically be displayed in the desired display region. The invention includes novel methods for providing feedback means to the user for the purpose of guiding the users eye to continue viewing new data as it is presented in the updated display view.